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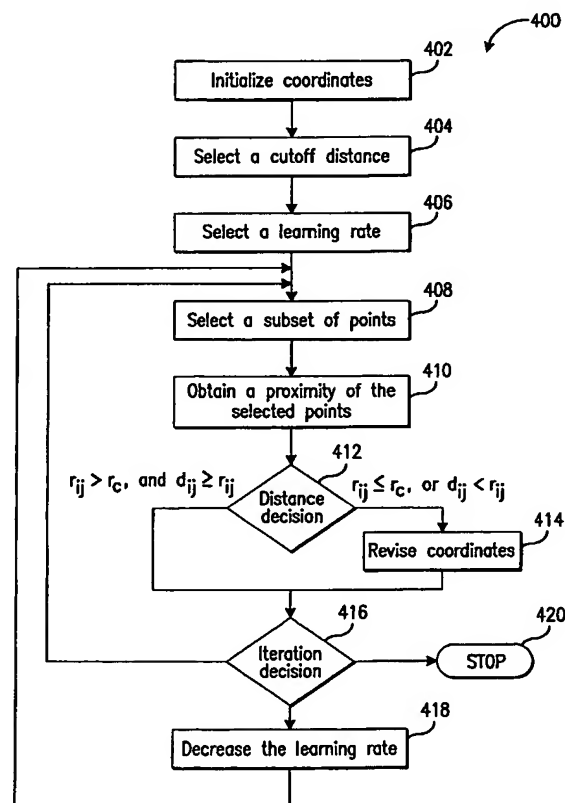
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(54) Title: METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR REPRESENTING OBJECT RELATIONSHIPS IN A MULTIDIMENSIONAL SPACE



(57) Abstract: Methods, systems and computer program products for mapping a set of related objects into a multidimensional space. The mapping is carried out using an iterative (e.g., pairwise) refinement strategy that attempts to ensure that the distances of the objects on the map satisfy a supplied set of upper and lower bounds. In a preferred embodiment, these upper and lower bounds are derived from a supplied set of relationships (similarities, dissimilarities, or proximities) between the objects. In another preferred embodiment, these distance bounds are chosen to preserve local relationships between neighboring objects while maintaining minimum separation between remote objects.

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